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BAKER BOTTS L.L.P.
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112-0228

EXAMINER
HEWITT II, CALVIN L

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/809,367	HOGAN ET AL.
	Examiner	Art Unit	
	CALVIN L. HEWITT II	3685	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 February 2009</u>.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-10</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

Status of Claims

1.   Claims 1-10 have been examined.

Response to Amendments/Arguments

2.   Regarding the 112 first paragraph rejection, Applicant's Specification does
not support a "second payment account number being reusable by the purchaser
for as long as the first payment account number is usable by the purchaser". To
the contrary, Applicant merely states that "if unauthorized persons were to
ascertain any pseudo account numbers, they would be unable to make
fraudulent transactions using them" a clear nod to Applicant's use of encryption
for authenticating transactions (page 3, paragraph [0008]). Nor would this citing
support the limitation of a "second payment account number being reusable by
the purchaser for as long as the first payment account number is usable by the
purchaser". A system that utilizes a pseudo payment number for transactions
protects the master payment number because the main number is not revealed
to a merchant. Therefore, to one of ordinary skill if a second or pseudo number is
compromised one of ordinary skill would create a new pseudo number (similar to
the single use embodiment of Flitcroft et al. where after a card number is used it
is invalidated and the user moves on to a new pseudo number- column 13, lines
38-57; column 23, lines 28-38).

Regarding the prior art, a "second payment account number being reusable by the purchaser for as long as the first payment account number is usable by the purchaser" is clearly taught by the system of Flitcroft et al.. Specifically, Flitcroft et al. teach pseudo numbers whose only restrictions are limitations directed to a specific location (column 8, lines 1-10 and 24-30), a specific merchant (column 16, lines 57-59), or a specific purpose (column 8, lines 1-10). Hence, a number can be reused, for example, as long as a consumer is making purchases over the internet (column 8, lines 7-10). However, if the master card number is invalidated then the pseudo number cannot be authorized (figure 7, item 714; column 25, lines 12-33). More specifically, Flitcroft states that if the master number is closed or delinquent then the pseudo number is no longer accessible (column 24, lines 30-37).

The 101 is also maintained as the newly added language merely recites "extra-solution" activity (*In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008)).

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4.   Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Based on Supreme Court precedent (See also *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions, a §101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

To meet prong (1), the method step should positively recite the other statutory class (the thing or product) to which it is tied. This may be accomplished by having the claim positively recite the machine that accomplishes the method steps. Alternatively or to meet prong (2), the method step should positively recite identifying the material that is being changed to a different state or positively recite the subject matter that is being transformed.

In this particular case, claim 1 fails prong (1) because the "tie" (e.g. using a computer) is representative of extra-solution activity. Additionally, the claim(s) fail prong (2) because the method steps do not transform the underlying subject matter to a different state or thing.

Claim 4 is also rejected as it recites similar language. Claims 2, 3 and 5-
10 are also rejected as each depends from either claim 1 or 4.

Claim Rejections - 35 USC § 112

5.   Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to
comply with the written description requirement. The claim(s) contains subject
matter which was not described in the specification in such a way as to
reasonably convey to one skilled in the relevant art that the inventor(s), at the
time the application was filed, had possession of the claimed invention.

Claim 1 recites a second payment number being reusable, "by the
purchaser for as long as the first payment account is usable by the purchaser".
Claim 4 contains a similar recitation. However, this limitation is not supported by
the Specification. While Applicant discloses the one-to-one relationship that
exists between a real and pseudo card numbers (Specification, figures 3a-b;
paragraph [0008]), to one of ordinary skill if it is determined that the pseudo-
number is no longer trusted or it has been compromised, a user can still use the
first number and a new pseudo-number would be calculated, thus leaving the old
pseudo number obsolete.

Claims 2 and 3, and 5-10 are also rejected as they depend from claims 1
and 4, respectively.

Claim Rejections - 35 USC § 103

6.   Claims 1-7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Walker et al., U.S. Patent No. 6,163,771 in view of Flitcroft et

al., U.S. Patent No. 6,636,833.

As per claims 1-7, 9, and 10, Walker et al. teach a method for conducting

a secure transaction by providing users with a list of proxy credit card numbers

(column 11, lines 20-25) comprising:

- assigning to a purchaser a first payment account number (real

  credit card number) having a status that changes over time,

  providing a second payment account number (pseudo credit card

  number) and having an encryption key assigned thereto (figures 7,

  8 and 13; column 7, lines 20-26)

- requesting authorization for payment of said transaction with the

  second (pseudo) number and not the first (real), identifying said

  purchaser's first payment number in response to the authorization

  request and responding to the authorization request based upon

  the status of the first number, based on a credit balance that

  changes over time (figures 3B, 9A-B, and 10-11B; column 7, lines

  20-26)

- a response to the authorization request is based on cryptographic code based on said encryption key (figures 6 and 9A-B; column 7, lines 28-51)

- providing a purchaser with a secure payment application which includes a cryptographic key that is unique to the first account number and a second or pseudo account number of the same length as the first (figures 6 and 7; column 6, lines 30-53; column/line 7/27-8/36)

- providing a purchaser with merchant data and generating a message authentication code as a function of merchant data and said cryptographic key and providing a merchant with the code and the pseudo account number (figure 3B; column 6, lines 15-28; column 9, lines 30-36)

- cryptographically processing the pseudo account number to produce the first account number (column/line 8/1-9/9)

- differentiating the pseudo number from the first number by special identifier within the pseudo account number, and by data within a transaction record (figures 7, 8 and 13; column 7, lines 37-51; column 8, lines 9-36)

- cryptographic key is a secret key (abstract)

Walker et al. do not specifically recite verifying that merchant data is correct. On the other hand, Walker teaches, as part of the single use credit card number

verification process, transmitting other information along with the encoded card single use credit card number such as an encoded time stamp, purchase information or merchant information (column 11, lines 8-19). Additionally, Walker et al. teach verifying the card number and the time stamp (column/line 8/37-9/3; column 11, lines 4-9). Therefore, a predictable result (KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007)) in light of Walker et al. would merchant information along with the single use credit number and verifying it would have been at least obvious to one of ordinary skill for a user or merchant to verify the amount to ensure that the user is being billed properly, and for the user, merchant or credit card issuer to verify the correctness of the merchant ID in order to prevent transaction cancellation based on an incorrect merchant ID. Regarding DES and DESX, Walker et al. implement their system using cryptographic algorithms (column 2, lines 30-34; column 7, lines 3-8). Hence, it would have been predictable for one of ordinary skill to encrypt the pseudo account number using RSA, DES or its variants such as DSA or DESX (Ex parte Smith, 83 USPQ2d 1509 (Bd. Pat. App. & Int. 2007)). Walker et al. do not explicitly recite re-usable pseudo account numbers. Flitcroft et al. teach a credit card system for providing users with limited-use card numbers (e.g. single use, reusable) (abstract; column 6, lines 52-64). Specifically, teach a system for creating an encrypted list proxy or second card number from a first (e.g. via mapping, no discernable link for obtaining the first number from the proxy,

additional card numbers cannot be predicted from those proxy numbers

previously issued) (column 10, lines 8-11; column 11, lines 10-14; column/line

12/10-13/15; column/line 19/65-22/57). Flitcroft et al. also teach limiting pseudo-

card use based on a prescribed threshold (column 6, lines 52-64). For example,

Flitcroft et al. teach pseudo cards that are valid as long as the sum of the

transaction in which the cards are used does not accumulate to a limit (column 7,

lines 55-64). Further, Flitcroft et al. teach pseudo cards that are limited only by

geographic location and purpose (column 8, lines 1-10 and 24-30), hence,

Flitcroft et al. teach second or pseudo cards that are reusable as long as the real

or first number is reusable. Therefore, it would have been obvious to one of

ordinary skill to combine the teachings of Walker et al. ('771, figure 13) and

Flitcroft et al. in order to create a more flexible system by allowing users to use

proxy card numbers for multiple transactions ('833; column 6, lines 52-64) and

obtain additional lists of numbers ('771, figure 13, column 11, lines 20-25; '8.33,

column 18, lines 25-44; column 19, lines 10-15)

7.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Walker et al., U.S. Patent No. 6,163,771 and Flitcroft et al., U.S. Patent No.

6,636,833 as applied to 4, and in further view of Lee et al., U.S. Patent No.

6,018,717.

As per claim 8, Walker et al. teach a message authentication code that comprises a digital signature generated by a secure payment application (column 8, lines 9-36). However, Walker et al. do not specifically recite public key certificates. Lee et al. teach a method for performing secure transactions using card unique certificates that are associated with a public key of a private/public key pair (column/line 11/15-12/18). Therefore, it would have been obvious to one of ordinary skill to combine the teachings of Walker et al. and Lee et al. in order to uniquely associate a transaction message with a user ('717, column/line 10/38-11/13) and to, in the event the private key ('771, abstract) is obtained by a malicious user, to provide protection against fraud by using different keys to encrypt and decrypt a transaction message ('717, column/line 10/38-11/13).

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

/Calvin L Hewitt II/

Supervisory Patent Examiner, Art Unit 3685